DOCUMENT RESUME

ED 469 601 CG 031 987

AUTHOR	Zaff, Jonathan F.; Calkins, Julia; Bridges, Lisa J.; Margie, Nancy Geyelin
TITLE	Promoting Positive Mental and Emotional Health in Teens: Some Lessons from Research. American Teens. Child Trends Research Brief.
INSTITUTION	Child Trends, Inc., Washington, DC.
SPONS AGENCY	Knight Foundation, Inc., Akron, OH.
PUB DATE	2002-09-00
NOTE	10p.
AVAILABLE FROM	Child Trends, 4301 Connecticut Avenue, N.W., Suite 100, Washington, DC 20008. Tel: 202-362-5580; Fax: 202-362-5533; Web site: http://www.childtrends.org. For full text: http://www.childtrends.org/ PDF/K5Brief.pdf.
PUB TYPE	Information Analyses (070)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS
DESCRIPTORS	*Adolescents; Alcoholism; Anxiety; Behavior Problems; Depression (Psychology); Drug Addiction; *Mental Health; *Mental Health Programs; *Program Effectiveness; Self Esteem

ABSTRACT

A significant minority of teens and preteens suffer from anxiety disorders, depression and other mood disorders, behavior problems, and drug and alcohol addiction. Others have low self-esteem, difficulty coping, and feelings of insecurity. Given the harmful consequences of such disorders, policymakers and practitioners should be alert to teens' mental and emotional health so that they can develop sound prevention and intervention strategies to address these challenges. In an effort to determine the best ways to prevent or address these problems, Child Trends conducted a review of nearly 300 research studies on teens' mental health and emotional well-being. This review suggests that mental health programs that use comprehensive, integrated approaches appear to be most effective in preventing such problems as conduct disorder, attention deficit hyperactivity disorder (ADHD), and alcohol and drug abuse. This brief is divided into two parts. The first addresses mental health in adolescence and the second covers emotional well-being. The "What Works" tables detail some of the programs and approaches that are most likely to succeed in these areas. Only experimentally evaluated programs are included in the review of "what works." Also included in the table are some "best bets," promising practices drawing on both experimental and quasi-experimental evaluations, other research, and wisdom from practitioners. (Contains 81 references.) (GCP)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 469 601

Promoting Positive Mental and Emotional Health in Teens: Some Lessons from Research

Child Trends Research Brief
September 2002

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

Q. Emig

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
2A

BEST COPY AVAILABLE

CG031987

Child TRENDS
RESEARCH BRIEF

4301 Connecticut Avenue, NW, Suite 100, Washington, DC 20008
Phone 202-362-5580 Fax 202-362-5533 www.childtrends.org

AMERICAN TEENS
A special look at "what works" in youth development in partnership with
John S. and James L. Knight Foundation

Promoting Positive Mental and Emotional Health in Teens: Some Lessons from Research

By Jonathan F. Zaff, Ph.D., Julia Calkins, Lisa J. Bridges, Ph.D., and Nancy Geyelin Margie September 2002

Overview *While our culture often portrays teens as moody, dramatic, and difficult, some young people have serious mental and emotional problems that go beyond the stereotype. A significant minority of teens and preteens suffer from anxiety disorders, depression and other mood disorders, behavior problems, and drug and alcohol addiction. Others have low self-esteem, difficulty coping, and feelings of insecurity. Given the harmful consequences of such disorders, both in adolescence and in later adult life, policy makers and practitioners should be alert to teens' mental and emotional health so that they can develop sound prevention and intervention strategies to address these challenges.*

In an effort to determine the best ways to prevent or address these problems, Child Trends conducted a review of nearly 300 research studies on teens' mental health and emotional well-being. This review suggests that mental health programs that use comprehensive, integrated approaches appear to be most effective in preventing such problems as conduct disorder (consistently breaking major societal norms or rules), attention deficit hyperactivity disorder (ADHD), and alcohol and drug abuse. Cognitive-behavioral therapy (changing a person's thoughts in order to change his or her behavior or emotional state), drug therapy, and community-level strategies (such as changing a teen's environment) appear to help reduce mental health disorders, including depression and anxiety. However, further evaluation studies are needed on the efficacy of drugs and other approaches among adolescents. In addition, research suggests that starting prevention programs early may ward off a number of mental and behavioral problems in adolescents and young adults. Our review of the research studies also found that programs aimed at improving one aspect of teens' emotional well-being may also have positive effects on other aspects. Homes and schools that are emotionally positive and warm and that provide support for adolescents' autonomy and achievement may boost teens' psychological and emotional well-being.

This brief is divided into two parts. The first addresses mental health in adolescence and the second covers emotional well-being. The What Works *tables on pages 4-5 detail some of the programs and approaches that are most likely to succeed in these areas. Only experimentally evaluated programs are included in the review of "what works." Also included in the table are some "best bets," promising practices drawing on both experimental and quasi-experimental evaluations, other research, and wisdom from practitioners.*

This is the fifth in a series of *Research Briefs* based on a comprehensive review of adolescent development research. The *American Teens* series covers reproductive health, physical health and safety, social skills, education, mental and emotional health, and civic engagement as they relate to adolescents.

Mental Health

We distinguish between two categories of mental health disorders in this brief. *Internalizing disorders*, such as depression, anxiety, and eating disorders, are expressed within the individual and reflect a troubled emotional state. *Externalizing disorders*, such as conduct disorder, attention-deficit hyperactivity disorder (ADHD), and alcohol and drug abuse, are expressed overtly.

The following findings on factors associated with mental health disorders are based on multivariate longitudinal and cross-sectional research studies. Multivariate longitudinal studies follow individuals across time and take into account three or more variables that may affect their development. Cross-sectional studies collect information on individuals at one point in time; hence they are often called "snapshot" studies. Since this research is not

BEST COPY AVAILABLE

experimental, we cannot make definite conclusions about cause and effect, but these findings provide "best bets" for program strategies.

Internalizing Disorders

Anxiety disorders often start in early childhood or adolescence and continue into adulthood.[1] These disorders, including depression and eating disorders, appear to have a genetic component[54] and tend to be gender-related, with females exhibiting higher levels of all internalizing disorders than males.[14, 34] Aspects of individuals' early personalities play major roles in internalizing disorders, such as negative self-appraisals for depression, and introversion for social anxiety.[39, 65, 69] Moreover, considerable overlap exists between depression and anxiety for children and adolescents, with no clear consensus on whether or not these two disorders are manifestations of the same underlying disorder or two unique disorders.[38] It is possible that the same factors affect depression and anxiety and, therefore, that the same programs or treatments can prevent and treat them.

As might be expected, parents also have a significant effect on teens' social and emotional development.[17] Children with internalizing disorders more often come from families in which parents are controlling, do not get along with each other, discourage their children's independence, avoid conflict, or are overprotective of and overinvolved in their children's lives.[9, 18, 43, 54, 75]

Externalizing Disorders

Externalizing disorders are consistent expressions of overt deviant behavior *over time*. These disorders should not be confused with adolescent experimentation such as periodically acting out or trying drugs or alcohol. Rather, externalizing disorders include persistent aggressive or other deviant acts, constant inability to sit still and pay attention, or regular and frequent abuse of alcohol and drugs. It is important to make the distinction between such entrenched and occasional behavior problems, so that policy and program staff do not waste precious time and money developing long-term, expensive, and inappropriate programs for short-term problems that will dissipate over time, with no or less extensive intervention.

Much research has been done on the continuity of problems like ADHD, conduct disorder, and antisocial behaviors across developmental stages. Considerable evidence suggests that externalizing disorders are stable over time. In fact, teens with disorders that began early in life and persist throughout adolescence are most at risk for continued problems. However, symptoms that appear for the first time in adolescence may dissipate naturally by early adulthood.[3, 29, 52, 74]

Individual characteristics, such as gender, genetics, and personality, are associated with drug use and abuse, but we have not found rigorous research on the role that individual characteristics play in ADHD or conduct disorder. A variety of factors in adolescents' lives have also been linked to drug use and abuse, including life stress, difficulty coping, deviance-prone attitudes, lack of parental support, and low academic performance.[79] Family factors – specifically, troubled parent-child relationships, family discord, and parents' and siblings' use of drugs and alcohol – increase the likelihood of adolescent conduct disorder and drug and alcohol use.[8, 23, 31, 55, 57, 77] as does interacting with deviant peers. The types of neighborhood in which teens live and the economic stability of the family also play a role, with teens and families who live in lower income neighborhoods being at higher risk for externalizing disorders.[2, 15, 16]

The media – specifically, television, magazines, movies, music, and the Internet – can also affect adolescents' mental health, although exactly how has proven difficult to determine.[47] Some of the evidence shows that when young people have aggressive and/or violent tendencies, these are notably aggravated by selective, heavy viewing of media violence and use of violent computer games.[73] Also noteworthy are the association between teens' eating disorders and the thin ideal promoted by the media and the glamorization of smoking in movies, television, and advertisements.[37]

Intervention Strategies

Few evaluations of programs have assessed the *implementation* of programs, that is, whether the programs were carried out properly.[21] This is important because, if programs were not implemented properly, then program designers and practitioners cannot know whether the program intended is really the program that was implemented and evaluated. Therefore, in reading about programs to address teens' mental health problems, cautious optimism is needed, especially regarding effective programs that do not address program implementation. Important aspects of implementation are the standardized training of providers, monitoring of actual performance, and adequate provision of the necessary time, supplies, and facilities to support the program. Another difficulty is that, while there is considerable research on mental health disorders in adults, there is comparatively little on the subject for teens. Results from adults *cannot* be assumed to apply to adolescents.

The following intervention strategies have been evaluated using randomized experimental designs, the "gold standard" for making cause and effect conclusions about "what works" to prevent or address psychological and behavioral problems. An example would be comparing outcomes for teens who were randomly assigned to a program or treatment group with similar teens who were not. Our review found that the most effective programs in treating adolescent mental health disorders seem to be those that include more than one intervention and prevention strategy. More specifically, a number of programs that have been experimentally evaluated appear to prevent or treat internalizing and externalizing disorders:

- **For ADHD,** a combination of medication and psychotherapy appears to be more effective than the use of a single-intervention method. And multi-component strategies that address individual, family, peer, neighborhood, and school factors are best at preventing externalizing disorders, such as promoting strong family bonds, teaching children social skills, and utilizing social service programs.[5, 10, 19, 34, 36, 50, 53]

- **For depression and anxiety,** effective treatments include psychotherapy (such as cognitive therapy), drug therapy (specifically, serotonin-specific re-uptake inhibitors, though the magnitude of impacts is in dispute), making a youth's environment more supportive, and changing an adolescent's environment from high-risk to low-risk (for example, providing housing vouchers to families so they can move out of neighborhoods with few resources).[4, 6, 12, 44, 58, 67]

We underscore that, at present, the precise impact of drug therapy is controversial and new research among adolescents is much-needed. There appears to be agreement that a placebo effect exists, but there is controversy about the clinical significance of this effect.[68] Some researchers argue that there is value to prescribing anti-depressants, explicitly stating that such medications are effective above and beyond the placebo effect. In their view, the effects of drugs may exceed and outlast a more short-term placebo effect. Some question the worth of such prescriptions, and suggest that the critical benefit for a patient who receives them comes from counseling or attention, not the medicine itself. Others assert that combined drug treatment and psychotherapy may be effective.[78] Furthermore, and particularly pertinent to this brief, the studies included in the recent analysis of anti-depressants and placebos do not focus on adolescents and therefore it is not known how placebos specifically affect teens.[46] Considering the disagreements and the gaps in knowledge on adolescents, more research is necessary to parse out the unique effects of anti-depressants and placebos for teens. Also, greater precision in diagnosis will be an important component of matching appropriate drugs with patient needs.

Multi-component approaches to address mental health disorders in adolescence are those that intervene at the individual level as well as take into consideration factors related to family, friends, neighborhood, and school. They may also include approaches with multiple methods, such as counseling of the adolescent combined with counseling of the family or coordinating services with the school and after-school programs and sometimes with social service case managers to help alleviate family hardships. Since the antecedents of mental health are multiple, it is reasonable for interventions to focus on multiple treatment and prevention strategies. However, most of the interventions studied here do not separate out the effects of each individual aspect of their strategy. So, when looking at the results, it is unclear whether each approach is essential, or whether only one or two of the approaches used are necessary for the program to be successful. In addition, there is little to no research on different combinations of effective practices, such as combining psychotherapy with making a youth's environment more supportive. More research is needed before we can make definitive conclusions about programs' specific content. However, the findings from longitudinal and cross-sectional studies provide support for multi-component strategies that incorporate multiple layers of youths' environments.

Our review also leads us to conclude that starting prevention programs as early as possible may help prevent mental disorders and externalizing problems in teens and adults, since many mental disorders begin early in young people's lives. (For more information on programs that seek to prevent mental health problems in early childhood, see reference.)[54]

Emotional Well-Being

The term emotional well-being has been used in the adolescent development literature to cover a wide range of aspects of psychological functioning, such as coping, self-regulation (emotions and behaviors), perceived autonomy and control, and social competence. We use emotional well-being as an umbrella term because of the important role emotions play in all aspects of human behavior and development, including mental and physical health, education and skill development, social competence, and the establishment of positive social relationships.[48, 71]

What Promotes Emotional Well-Being in Teens?*

Longitudinal studies suggest that elements of emotional well-being tend to be consistent across time through childhood and adolescence.[33] These studies, as well as cross-sectional research, also point out associations among the various elements of well-being noted above.[35, 62, 63] For example, longitudinal research has looked into the individual characteristics that can lead to later differences in negative and positive feelings, self-esteem, and perceived competence. Longitudinal studies have found positive associations between how one feels about himself or herself in terms of academic ability, physical attractiveness, and socialization and measures of overall self-esteem. These studies have also found that higher perceived competence can lead to positive changes in self-esteem over time, while lower perceived competence leads to negative changes.[49]

Furthermore, low levels of perceived competence have been found to be associated with negative feelings across time.[59] In one longitudinal study, teens who lacked social competence at the start of the study tended to be have more negative feelings over time.[11] We will need further studies before we can make firm conclusions about what leads to differences in teens' self-esteem and perceived competence, and we need more longitudinal research about differences in coping styles and strategies.

Not surprisingly, how teens are parented and the emotional well-being of their parents play roles in teens' emotional well-being.[40, 42, 61] Parents' financial situation is also a possible factor.[51] Beyond the family, relationships with peers, while not as

What Works?

The *What Works* tables, based on a review of nearly 300 programs that aim to improve adolescents' mental and emotional health, identifies which programs and approaches are most likely to succeed.

The headings on the left identify the areas targeted for intervention:

- The "What Works" column describes programs in this area that have been found to be effective through experimental evaluations.
- The "What Doesn't Work" column lists interventions or activities that have been tried and found ineffective with experimental evaluations.
- The "Mixed Reviews" column highlights interventions that have been shown to be effective in some, but not all, programs or for some groups of adolescents but not all teens. Where there are empty spaces in the table, it means that little evidence has been found for or against programs in that particular area.
- Finally, the "Best Bets" column describes promising findings from research studies that take account of other factors related to mental and emotional health, but that have not been tested with experimental designs. It also includes results from quasi-experimental studies, and wisdom from practitioners working in the field.

For a more detailed version of this table, with links to research and program descriptions, consult Child Trends' Web site at www.childtrends.org.

Summary Table: Review of the Research Literature and Implications for Targeted Activities to Improve Adolescent Emotional Well-Being

(This is an abridged version of a table available at http://www.childtrends.org/youthdevelopment_intro.asp. The longer table links to research and program descriptions.)

	Experimental Research Studies			Non-Experimental Research Studies
AREAS FOR TARGETED INTERVENTION ACTIVITIES	WHAT WORKS	WHAT DOESN'T WORK	MIXED REVIEWS	"BEST BETS"
Self-Esteem	- Promote connections between adolescents and their teachers and peers during the transition years from junior to senior high school (e.g., the School Transition Environment Project).[28]	- Tricyclic antidepressants.[65]		- Promote positive self-esteem by promoting positive self-concepts in academic and social realms. - Promote achievement in specific areas of youth's life (e.g., academic, athletics). - Promote parenting strategies that involve supporting youth's autonomy. - Promote parenting strategies that include being supportive and having open communication with youth. - Promote teaching practices that include support for youth autonomy. - Implement school policies that promote autonomy.
Coping	- Teach adolescents general coping techniques and stress management skills (e.g., Yale-New Haven Social Problem-Solving program; Comprehensive Stress Management Program for Children).[13, 76]			- Provides social support resources.

*It should be noted that the research in this field has a number of methodological limitations. Most research studies we reviewed used a correlational design and only some were longitudinal. Therefore, all of the findings should be considered tentative pending further study.

Summary Table: Review of the Research Literature and Implications for Targeted Activities to Improve Adolescent Mental Health.

	Experimental Research Studies			Non-Experimental Research Studies
AREAS FOR TARGETED INTERVENTION ACTIVITIES	WHAT WORKS	WHAT DOESN'T WORK	MIXED REVIEWS	"BEST BETS"
Depression	- Cognitive-behavioral therapy.[6] - Selective Serotonin Reuptake Inhibitors (SSRI).[44]	- Tricyclic antidepressants.[66]		- Foster parent-child relationships that are warm and positive, instead of harsh and punitive. - Create social support systems for depressed youth. - Take steps to lessen adolescents' negative self-appraisals and self-criticism. - Take steps to lessen negative affectivity to prevent the development of depression.
Anxiety	- Cognitive-behavioral therapy.[67] - Selective Serotonin Reuptake Inhibitors (SSRI).[58]			- Treat phobias through systematic desensitization. - Target prevention programs to children/adolescents who were inhibited as toddlers (being inhibited is an early predictor of social anxiety). - Take steps to lessen negative affectivity in order to prevent the development of anxiety disorders. - Promote parenting strategies that allow the development of children's/adolescents' independence.
ADHD	- Medication or medication plus psychosocial or behavioral therapy.[53]			
Conduct Disorder				- Target prevention programs to young children who show early indications of conduct problems. - Prevent maternal smoking during pregnancy. - Encourage parents to be involved in their children's lives and to monitor and supervise their children's activities. - Teach youth to interpret social cues accurately. - Promote peer relationships characterized by positive peer influences.
Drug and Alcohol Abuse	- School-based drug prevention programs (e.g., Life Skills Training), in which students are taught to resist the pressures of advertisements, build self-esteem, manage anxiety, communicate effectively, and develop interpersonal relationships.[5] - School-based programs (e.g., Project Towards No Drugs) that teach youth coping and self-control skills, teach youth about the myths of drugs and alcohol, and teach youth about the consequences of drug and alcohol use.[20] - Community-based family programs (e.g., Creating Lasting Connections) that seek to strengthen family bonds and teach children skills for personal growth and communication through community organizations such as places of worship and recreation centers.[41] - Community-based alcohol prevention programs (e.g., Project Northland) that include an in-school curriculum, parent education, and participation by youth in alcohol-free activities outside of school.[56] - Mentoring programs (e.g., Big Brothers/Big Sisters and Across Ages) that pair an adolescent with a supportive adult mentor.[50, 72] - Programs that create no-drug norms and develop drug resistance strategies through an adult-taught curriculum, peer leaders, and parental involvement (e.g., ALERT and the Adolescent Alcohol Prevention Trial).[22, 27]		- Programs that teach parent-child intervention strategies, coupled with community-level initiatives (e.g., the Midwestern Prevention Project; has positive short-term effects, but not necessarily long-term effects).[10]	- Increase adolescents' regulatory control. - Improve parental monitoring and decrease parents' alcohol consumption. - Provide adolescents with positive peer role models. - Implement programs (such as Boys and Girls Clubs of America) offering cultural enrichment, health and physical education, social recreation, personal and educational development, citizenship, and leadership development.
Multiple Internalizing and Externalizing Problems	- School-based programs (e.g., Reconnecting Youth) that promote school bonds and the involvement of parents, and teach a crisis response plan.[26] - Help families move from high-poverty neighborhoods to low-poverty neighborhoods (e.g., Moving to Opportunity).[19]			- Promote healthy family functioning and good parenting practices. - Intervene early in children's lives to prevent problems over the course of their development. Programs (e.g., Seattle Social Development Project) should provide parenting classes and social competence training for children (problem solving, peer pressure resistance).

significant as those with parents, also affect teens' emotional well-being[7, 25, 32] as do teens' feelings about how they are being treated in school and by teachers.[24, 60, 64] Finally, neighborhood factors such as unemployment, poverty, crime, and lack of resources are also associated with low self-esteem and increased psychological problems.[62]

Intervention Strategies

Prevention and intervention programs do not usually focus on emotional well-being, but some do target improved emotional understanding as a precursor to boosting teens' social competence and preventing violence.[80, 81] Even though few programs actually target teens' emotional well-being, some include measures of aspects of emotional well-being – such as self-esteem and sadness – in their program evaluations. These evaluations have found few impacts. Coping, on the other hand, has been specifically targeted by a few programs, and evaluations suggest that teaching teens how to manage stress can improve their coping abilities.[12, 13]

Implications For Programs

Based on our review of research on mental and emotional well-being in adolescence, we offer the following observations, which have implications for the development of policies and programs in this area:

- Measures of mental and emotional well-being tend to be related to each other, suggesting that programs aimed at improving one aspect of well-being may have positive effects on others.
- Adolescent mental and emotional well-being is associated with teens' environments, including parents and family, school, and neighborhood and community characteristics. Links have been found consistently between teens' well-being and environments that are emotionally positive and warm and that provide support for developing adolescent autonomy. Some research suggests that positive experiences in one area (for example, in the family, among peers, at school, through youth community service, or at work) may lessen the effect of negative experiences in other areas. Also, multi-component strategies seem more appropriate than narrow, single-component strategies.
- Positive changes in mental and emotional well-being can be promoted by changes in the environment. More speculatively, programs designed to improve functioning in one area may have a positive effect on mental health and emotional well-being even when other areas remain relatively unchanged.

Next Steps For Research

Much research has been conducted on ways to prevent mental and behavioral problems among adolescents, resulting in a large knowledge base for practitioners and policy makers. However, there is still a great deal that needs to be learned before definitive conclusions can be made regarding what promotes mental health among America's teens:

- More experimental evaluations of treatment and prevention programs are needed. In particular, more research on approaches to treat depression, anxiety, and eating disorders among adolescents (and younger children) is needed. Also, little evidence exists about how properly to treat eating disorders, and little is known about the interaction of different levels of the environment on teens' internalizing disorders.
- More research needs to be conducted on a topic that is frequently overlooked – positive mental health. When most people consider mental health, they think of mental illness. And the lack of rigorous research on mental illness among adolescecents is real. Even so, there is a relative dearth of information about teens' positive mental health – that is, on teens who are optimistic, happy, and prepared for life. Policy makers and practitioners should try to learn more about such aspects in order to help identify strategies to promote optimism, self-concept (the sum of an individual's belief about his or her attributes),[34] and identity in teens. Specifically, research should follow children and adolescents over time and should include multiple mental health concepts, both positive and negative, and an array of predictive variables that assess the roles of the individual, family, school, and community. Based in advances in neuroscience regarding the powerful impact of early experiences on the structure and function of the brain, there is also need for more study on the effects of early childhood education not only on school readiness, but also on positive mental health in adolescence.

This *Research Brief* summarizes two longer reports: *Background for Community-Level Work on Mental Health and Externalizing Disorders in Adolescence: Reviewing the Literature on Contributing Factors* (2001, Child Trends: Washington, D.C.), by Jonathan F. Zaff, Ph.D., and Julia Calkins, and *Background for Community-Level Work on Emotional Well-being in Adolescence: Reviewing the Literature on Contributing Factors* (2001, Child Trends: Washington, D.C.), by Lisa J. Bridges, Ph.D., Nancy Geyelin Margie, and

Jonathan F. Zaff, Ph.D. Both reports were prepared for the John S. and James L. Knight Foundation. Kristin Anderson Moore, Ph.D., is the Principal Investigator and Jonathan Zaff, Ph.D., is the Project Director. The brief was prepared by Anne Bridgman and was edited by Amber Moore, Kristin Moore, Harriet J. Scarupa and the study's authors. For more information on the reports, call the Child Trends' publications office, 202-362-5580. Publications may also be ordered from Child Trends' Web site, www.childtrends.org.

Child Trends, founded in 1979, is an independent, nonpartisan research center dedicated to improving the lives of children and their families by conducting research and providing science-based information to the public and decision-makers. For additional information on Child Trends, including a complete set of available *Research Briefs*, please visit our Web site.

Child Trends gratefully acknowledges the John S. and James L. Knight Foundation for support of this special series of *Research Briefs* on *American Teens*.

References

[1]Albano, A. M., Chorpita, B. F., & Barlow, D. H. (1996). Childhood anxiety disorders. In E. J. Mash & R. A. Barkley (Eds.), Child Psychopathology (pp. 196-241). New York, NY: The Guilford Press.

[2]Ananhensel, C. S., & Sucoff, C. A. (1996). The neighborhood context of adolescent mental health. *Journal of Health and Social Behavior, 37*, 293-310.

[3]Barkley, R. A., Fischer, M., Edelbrock, C. S., & Smallish, L. (1990). The adolescent outcome of hyperactive children diagnosed by research criteria: I. An 8-year prospective follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 29*(4), 546-557.

[4]Barrett, P.M., Dadds, M.R., & Rapee, R.M. (1996). *Family treatment of childhood anxiety: A controlled trial. Journal of Consulting and Clinical Psychology, 64*, 333-342.

[5]Botvin, G. J., Baker, E., Dusenbury, L., Botvin, E., & Diaz, T. (1995). Long-term follow-up results of a randomized drug abuse prevention trial in a white, middle-class population. *Journal of the American Medical Association, 273*(14), 1106-1113.

[6]Brent, D.A., Holder, D., Kolko, D., Birmaher, B., Baugher, M., Rother, C., Iyengar, S., & Johnson, B.A. (1997). A clinical psychotherapy trial for adolescent depression comparing cognitive, family, and supportive therapy. *Archives of General Psychiatry, 54*, 877-885.

[7]Call, K.T., & Mortimer, J.T. (2001). Arenas of comfort in adolescence: A study of adjustment in context. Mahwah, NJ: Erlbaum.

[8]Chassin, L., Curran, P. J., Hussong, A. M., & Colder, C. R. (1996). The relation of parent alcoholism to adolescent substance use: A longitudinal follow-up study. *Journal of Abnormal Psychology, 105*(1),70-80.

[9]Chorpita, B. F., & Barlow, D. H. (1998). The development of anxiety: The role of control in the early environment. *Psychological Bulletin, 124*(1), 3-21.

[10]Chou, C. P., Montgomery, S., Pentz, M. A., Rohrbach, L. A., Anderson Johnson, C., Flay, B. R., & MacKinnon, D. P. (1998). Effects of a community-based prevention program on decreasing drug use in high-risk adolescents. *American Journal of Public Health, 88*(6), 944-948.

[11]Cole, D.A., Peeke, L., Dolezal, S., Murray, N., & Canzonniero, A. (1999). A longitudinal study of negative affect and self-perceived competence in young adolescents. *Journal of Personality and Social Psychology, 77*, 851-862.

[12]Compas, B.E. (1993). Promoting positive mental health during adolescence. In S.G. Millstein, A.C. Petersen, & E.O. Nightingale (Eds.), Promoting the health of adolescents: New directions for the twenty-first century (pp. 159-179). New York: Oxford University Press.

[13]Compas, B. E., Ledoux, N., Howell, D.C., Phares, V., Williams, R.A., Giunta, C.T., & Banez, G. A. (1991). Enhancing coping and stress management skills in children and adolescents: Evaluation of a school-based intervention. Unpublished manuscript, University of Vermont.

[14]Compas, B. E., Oppedisano, G., Connor, J. K., Gerhardt, C. A., Hinden, B. R., Achenbach, T. M., & Hammen, C. (1997). Gender differences in depressive symptoms in adolescence: Comparison of national samples of clinically referred and nonreferred youths. *Journal of Consulting and Clinical Psychology, 65*(4), 617-626.

[15]Conger, R. D., Conger, K. J., Elder, G. H., Lorenz, F. O., Simons, R. L., & Whitbeck, L. B. (1993). A family process model of economic hardship and adjustment of early adolescent boys. *Child Development, 63*, 526-541.

[16]Conger, R. D., Conger, K. J., Elder, G. H., Lorenz, F. O., Simons, R. L., & Whitbeck, L. B. (1993). Family economic stress and adjustment of early adolescent girls. *Developmental Psychology, 29*(2), 206-219.

[17]Cox, M. (in press). Parent-child relationships. In M. Bornstein, C. Keyes, K. Moore, & L. Davidson (Eds.), Well-being: Positive development across the lifespan. New York: Lawrence Erlbaum.

[18]Davies, P. T., & Windle, M. (1997). Gender-specific pathways between maternal depressive symptoms, family discord, and adolescent adjustment. *Developmental Psychology, 33*(4), 657-668.

[19]Del Conte, A., & Kling, J. (2001, January/February). A synthesis of MTO research on self-sufficiency, safety and health, and behavior and delinquency. *Poverty Research News, 5*(1), 3-6.

[20]Dent, C.W., Sussman, S., & Stacy, A.W. (2001). Project Towards No Drug Abuse: Generalizability to a general high school sample. *Preventive Medicine: An International Journal Devoted to Practice & Theory, 32*, 514-520.

[21]Dimitrovich, C.E., & Greenberg, M.T. (2000). The study of implementation: Current findings from effective programs that prevent mental disorders in school-aged children. *Journal of Educational Psychological Consultation, 11*, 193-221.

[22]Donaldson, S. I., Graham, J. W., & Hansen, W. B. (1994). Testing the generalizability of intervening mechanism theories: Understanding the effects of adolescent drug use prevention interventions. *Journal of Behavioral Medicine, 17*, 195-216.

[23]Duncan, T. E., Duncan, S. C., & Hops, H. (1996). The role of parents and older siblings in predicting adolescent substance use: Modeling development via structural equation latent growth methodology. *Journal of Family Psychology, 10*(2), 158-172.

[24]Dweck, C.S. (1991). Self-theories and goals: Their role in motivation, personality, and development. In R.A. Diensthier (Ed.), Perspectives on Motivation. Nebraska Symposium on Motivation (Vol. 38). Lincoln, NE: University of Nebraska Press.

[25]Eccles, J.S., Early, D., Frasier, K., Belansky, E., & McCarthy, K. (1997). The relation of connection, regulation, and support for autonomy to adolescents' functioning. *Journal of Adolescent Research, 12*, 263-286.

[26]Eggert, L.L., Thompson, E.A., Herting, J.R., Nicholas, L.J., & Dickers, B.G. (1994). Preventing adolescent drug abuse and high school dropout through an intensive social network development program. *American Journal of Health Promotion, 8*, 202-215.

[27]Ellickson, P. L. (1998). Preventing adolescent substance abuse: Lessons from the Project ALERT program. In J. Crane (Ed.), Social programs that work. New York: Russell Sage Foundation.

[28]Felner, R. D., & Adan, A. M. (1988). The school transition environment project: An ecological intervention and evaluation. In R. H. Price, E. L. Cowen, R. P. Lorion, J. Ramos-McKay, & B. Hitchins (Eds.), Fourteen ounces of prevention: A casebook of exemplary primary prevention programs. Washington, DC: American Psychological Association.

[29]Fergusson, D. M., Lynskey, M. T., & Horwood, L. J. (1996). Factors associated with continuity and changes in disruptive behavior patterns between childhood and adolescence. *Journal of Abnormal Child Psychology, 24*(5), 533-553.

[30]Franzoi, S. L. (1996). Social Psychology. Madison, WI: Brown & Benchmark Publishers.

[31]Fuligni, A. J., Eccles, J. S., Barber, B. L., & Clements, P. (2001). Adolescent peer orientation and adjustment during high school. *Developmental Psychology, 37*(1), 28-36.

[32]Geure, C., Bukowski, W.M., Aquel-Asaee, J., & Sippola, L.K. (1996). Interactions between family environment and friendship and associations with self-perceived well-being during early adolescence. *Child Development, 67*, 2201-2216.

[33]Ge, X., & Conger, R.D. (1999). Adjustment problems and emerging personality characteristics from early to late adolescence. *American Journal of Community Psychology, 27*, 429-459.

[34]Ge, X., Conger, R.D., & Elder, G.H. (2001). Pubertal transition, stressful life events, and the emergence of gender differences in adolescent depressive symptoms. *Developmental Psychology, 37*, 404-417.

[35]Griffith, M.A., Dubow, E.F., & Ippolito, M.F. (2000). Developmental and cross-situational differences in adolescents' coping strategies. *Journal of Youth and Adolescence, 29*, 183-204.

[36]Harrell, A., Cavanaugh, S., & Sridharan, S. (1999). Evaluation of the Children at Risk Program: Results 1 year after the end of the program (Report No. NCJ 178914). Washington, DC: National Institute of Justice.

[37]Harrison, K. (2000). The body electric: Thin-ideal media and eating disorders in adolescents. *Journal of Communication, 50*(3), 119-143.

[38]Hayward, C., Killen, J. D., Kraemer, H. C., & Barr Taylor, C. (2000). Predictors of panic attacks in adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*(2), 207-214.

[39]Hoffman, K. B., Cole, D. A., Martin, J. M., Tram, J., & Serocynski, A. D. (2000). Are the discrepancies between self- and others' appraisals of competence predictive or reflective of depressive symptoms in children and adolescents? A longitudinal study, part II. *Journal of Abnormal Psychology, 109*(4), 651-662.

[40]Jackson, S., Bijstra, J., Oostra, L., & Bosma, H. (1998). Adolescents' perceptions of communication with parents relative to specific aspects of relationships with parents and personal development. *Journal of Adolescence, 21*, 305-322.

[41]Johnson, K., Strader, T. N., Berbaum, M., Bryant, D., Bucholtz, G., Collins, D., & Noe, T. (1996). Reducing alcohol and other drug use by strengthening community, family, and youth resiliency: An evaluation of the Creating Lasting Connections program. *Journal of Adolescent Research, 2*(1), 36-67.

[42]Juang, L.P., & Silbereisen, R.K. (1999). Supportive parenting and adolescent adjustment across time in former East and West Germany. *Journal of Adolescence, 22*, 719-736.

[43]Katainen, S., Raikkonen, K., Keskivaara, P., & Keltikangas-Jarvinen, L. (1998). Maternal child-rearing attitudes and role satisfaction and children's temperament as antecedents of adolescent depressive tendencies: Follow-up study of 6- to 15-year-olds. *Journal of Youth and Adolescence, 28*(2), 139-163.

[44]Keller, M.D., Ryan, N.D., Strober, M., Klein, R.G., Kutcher, S.P., Birmaher, B., Hagino, O.R., Koplewicz, H., Carlson, G.A., Clarke, G.N., Emslie, G.J., Feinberg, D., Geller, B., Kusumaker, V., Papatheodorou, G., Sack, W.H., Sweeney, M., Wagner, K.D., Weller, E.B., Winters, N.C., Oakes, R., & McCafferty, J.P. (2001). Efficacy of paroxetine in the treatment of adolescent major depression: A randomized, controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*, 762-772.

[45]Killen, J. D., Barr Taylor, C., Hammer, L. D., Litt, I., Wilson, D. M., Rich, T., Hayward, C., Simmonds, B., Kraemer, H., & Varady, A. (1993). An attempt to modify unhealthful eating attitudes and weight regulation practices of young adolescent girls. *International Journal of Eating Disorders, 13*(4), 369-384.

[46]Kirsch, I., Moore, T.J., Scoboria, A., & Nicholls, S.S. (2002). The emperor's new drugs: An analysis of antidepressant medication data submitted to the U.S. Food and Drug Administration. *Prevention & Treatment, 5*, Article 23. Retrieved from http://www.journals.apa.org/prevention/volume5/pre0050023a.html

[47]Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist, 53*(9), 1017-1031.

[48]Lazarus, R.S. (1991). Emotions and adaptation. New York: Oxford University Press.

[49]Lord, S.E., Eccles, J.S., & McCarthy, K.A. (1994). Surviving the junior high school transition: Family processes and self-perceptions as protective and risk factors. *Journal of Early Adolescence, 14*, 162-199.

[50]LoSciuto, L., Rajala, A., Townsend, T. N., & Taylor, A. S. (1996). An outcome evaluation of Across Ages: An intergenerational mentoring approach to drug prevention. *Journal of Adolescent Research, 11*(1), 116-129.

[51]Mayhew, K.P., & Lempers, J.D. (1998). The relation among financial strain, parenting, parent self-esteem, and adolescent self-esteem. *Journal of Early Adolescence, 18*, 145-172.

[57]Moffitt, T. E., Caspi, A., Dickson, N., Silva, P., & Stanton, W. (1996). Childhood-onset versus adolescent-onset antisocial conduct problems in males: Natural history from ages 3 to 18 years. *Development and Psychopathology, 8*, 399-424.

[58]MTA Cooperative Group (1999). A 14-month randomized clinical trial of treatment strategies for attention-deficit/hyperactivity disorder. *Archives of General Psychiatry, 56*, 1073-1086.

[59]O'Connor, T. G., McGuire, S., Reiss, D., Hetherington, E. M., & Plomin, R. (1998). Co-occurrence of depressive symptoms and antisocial behavior in adolescence: A common genetic liability. *Journal of Abnormal Psychology, 107*(1), 27-37.

[60]Offord, D. R., Boyle, M. H., Racine, T. A., Fleming, J. E., Cadman, D.T., Blum, H. M., Byrne, C., Links, P. S., Lipman, E. L., MacMillan, H.L., Grant, N. I., Sanford, M. N., Szatmari, P., Thomas, H., & Woodward, C.A. (1992). Outcome, prognosis, and risk in a longitudinal follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry, 31*(5), 916-923.

[61]Perry, C. L., Williams, C. L., Veblen-Mortenson, S., & Toomey, T. (1996). Project Northland: Outcomes of a community-wide alcohol use prevention program during early adolescence. *American Journal of Public Health, 86*(7), 956-965.

[62]Pettit, G. S., Dodge, K. A., & Moore, D. W. (1999). The impact of after-school peer contact on early adolescent externalizing problems is moderated by parental monitoring, perceived neighborhood safety, and prior adjustment. *Child Development, 70*(3), 768-778.

[63]Research Unit on Pediatric Psychopharmacology Anxiety Study Group (2001). *Fluvoxamine for the treatment of anxiety disorders in children and adolescents. New England Journal of Medicine, 344*(17), 1279-1285.

[64]Roeser, R.W., Eccles, J.S., & Sameroff, A.J. (1998). Academic and emotional functioning in early adolescence: Longitudinal relations, patterns, and prediction by experience in middle school. *Development and Psychopathology, 10*, 321-352.

[65]Roeser, R.W., Midgley, C., & Urdan, T.C. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belonging. *Journal of Educational Psychology, 88*, 408-422.

[66]Rogers, M.J., & Holmbeck, G.N. (1997). Effects of interparental aggression on children's adjustment: The moderating role of cognitive appraisal and coping. *Journal of Family Psychology, 11*, 125-130.

[67]Rosenberg, M., Schooler, C., & Schoenbach, C. (1989). Self-esteem and adolescent problems: Modeling reciprocal effects. *American Sociological Review, 54*, 1004-1018.

[68]Rosenberg, M., Schooler, C., Schoenbach, C., & Rosenberg, F. (1995). Global self-esteem and specific self-esteem: Different concepts, different outcomes. *American Sociological Review, 60*, 141-156.

[69]Ryan, R.M., Stiller, J.D., & Lynch, J.H. (1994). Representations of relationships to teachers, parents, and friends as predictors of academic motivation and self-esteem. *Journal of Early Adolescence, 14*(2), 226-249.

[70]Schwartz, C. E., Snidman, N., & Kagan, J. (1999). Adolescent social anxiety as an outcome of inhibited temperament in childhood. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*(8), 1008-1015.

[71]Sommers-Flanagan, J. & Sommers-Flanagan, R. (1996). Efficacy of antidepressant medication with depressed youth: What psychologists should know. *Professional Psychology: Research and Practice, 27*(2), 145-153.

© 2002 Child Trends

[72]Spence, S. H., Donovan, C., & Brechman-Toussaint, M. (2000). The treatment of childhood social phobia: The effectiveness of a social skills training-based, cognitive-behavioral intervention, with and without parental involvement. *Journal of Child Psychology and Psychiatry, 41*(6), 713-726.

[73]Stanton, A.L. (2002). Introduction to Kirsch, Moore, Scoboria, & Nicholls (2002) and expert commentaries. *Prevention & Treatment, 5*, Article 21. Retrieved from http://www.journals.apa.org/prevention/volume5/pre0050023a.html

[74]Strober, M. (1980). Personality and symptomatological features in young, nonchronic anorexia nervosa patients. *Journal of Psychosomatic Research, 24*, 353-359.

[75]Taylor, R.D. (2000). An examination of the association of African American mothers' perceptions of their neighborhoods with their parenting and adolescent adjustment. *Journal of Black Psychology, 26*, 267-287.

[76]Thompson, R.A. (1990). Emotion and self-regulation. In R.A. Thompson (Ed.), Socio-emotional development: Vol. 36. *Nebraska Symposium on Motivation* (pp. 367-467). Lincoln, NE: University of Nebraska Press.

[77]Tierney, J. P., Grossman, J. B., & Resch, N. L. (1995). *Making a difference: An impact study of Big Brothers Big Sisters*. Philadelphia, PA: Public/Private Ventures.

[78]U.S. Public Health Service, Office of the Surgeon General. (2001). *Youth violence: A report of the Surgeon General*. Washington, DC: Department of Health and Human Services.

[79]Vitaro, F., Gendreau, P. L., Tremblay, R. E., & Oligny, P. (1998). Reactive and proactive aggression differentially predict later conduct problems. *Journal of Child Psychology and Psychiatry, 39*(3), 377-385.

[80]Wagner, B. M., Cohen, P., & Brook, J. S. (1996). Parent/adolescent relationships: Moderators of the effects of stressful life events. *Journal of Adolescent Research, 11*(3), 347-374.

[81]Weissberg, R. P., Caplan, M. Z., & Sivo, P. J. (1989). A new conceptual framework for establishing school-based social competence promotion programs. In L. A. Bond & B. E. Compas (Eds.), Primary prevention and promotion in the schools (pp. 256-296). Newbury Park, CA: Sage.

[82]Weissman, M. M., Warner, V., Wickramaratne, P. J., & Kandel, D. B. (1999). Maternal smoking during pregnancy and psychopathology in offspring followed in adulthood. *Journal of the American Academy of Child and Adolescent Psychiatry, 38*(7), 892-899.

[83]Weissman, M.M., Markowitz, J.C., Klerman, G.L., (2000). *Comprehensive Guide to Interpersonal Psychotherapy*. New York: Basic Books.

[84]Wills, T. A., McNamara, G., Vaccaro, D., & Hirky, A. E. (1996). Escalated substance use: A longitudinal grouping analysis from early to middle adolescence. *Journal of Abnormal Psychology, 105*(2), 166-180.

[85]Zins, J.E. (2001). Examining opportunities and challenges for school-based prevention and promotion: Social and emotional learning as an exemplar. *Journal of Primary Prevention, 21*, 441-446.

[86]Zins, J.E., Travis, L.F., & Freppon, P.A. (1997). Linking research and educational programming to promote social and emotional learning. In P. Salovey & D.J. Sluyter (Eds.), Emotional development and emotional intelligence: Educational implications (pp. 257-277). New York: Basic Books.

Child Trends
4301 Connecticut Avenue, NW, Suite 100
Washington, DC 20008

ADDRESS SERVICE REQUESTED

NONPROFIT
U.S. POSTAGE
PAID
Permit No. 1897
Washington, D.C.

01

l.ll.....lll...l...l.ll...l...l...l...l.ll...l...lll...l...l...l...l.ll...l...l...l...l.ll...l...l

******AUTO**MIXED AADC 200 T12 P1
MS. KAREN SMITH
ERICEECE CHILDREN'S RESEARCH CENTER
UNIVERSITY OF ILLINOIS
51 GERTY DR RM 9
CHAMPAIGN IL 61820-7467

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

NOTICE

Reproduction Basis

[X] This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

[ ] This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").